



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/073,434	02/11/2002	Paul W. Novell	0325.00530	4793

21363 7590 12/21/2004

CHRISTOPHER P. MAIORANA, P.C.
24840 HARPER
ST. CLAIR SHORES, MI 48080

EXAMINER

KNOLL, CLIFFORD H

ART UNIT	PAPER NUMBER
----------	--------------

2112

DATE MAILED: 12/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n N .

10/073,434

Applicant(s)

NOVELL ET AL.

Examiner

Clifford H Knoll

Art Unit

2112

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This Office Action is responsive to communication filed 10/04/04. Currently claims 1-21 are pending.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

1. *Claims 1-10 and 13-18 are rejected under 35 U.S.C. 102(a) as being anticipated by OTG Supplement to the USB Specification 1.0 (OTG specification).*

Regarding claims 1-5, 7-8, and 16-17, the OTG specification discloses the first circuit and legacy USB device configured to communicate as a host (e.g., §3.1; §5.3.4, “standard host”), a second circuit and DRD device configured to communicate through a second interface as a host or peripheral (e.g., §3.2), and a third circuit to control the circuits and transfer information (e.g., §6.3).

Regarding claim 6, the OTG specification also discloses the second device comprises a legacy USB device (e.g., §3.1, “compliant”).

Regarding claim 9, the OTG specification also discloses the third circuit is a device selected from a group consisting of a microcontroller, ASIC, and PLD (e.g., §6.8, “state machine”).

Art Unit: 2112

Regarding claim 10, the OTG specification also discloses configuring the third circuit in response to a computer executable instruction (e.g., §6.5, §6.8.1).

Regarding claim 13, the OTG specification also discloses that the apparatus is integrated with the first device (e.g., §3.2, “fully compliant”).

Regarding claim 14, the OTG specification also discloses that the apparatus is a stand-alone accessory (e.g., §3.3).

Regarding claim 15, the OTG specification also discloses adding USB OTG DRD capabilities to the first device with no modifications to the first device (e.g., §3.2, “fully compliant”).

Regarding claim 18, the OTG specification also discloses responding to an enumeration request with descriptors modified to indicate OTG DRD capability (§6.4).

2. *Claims 1-10 and 13-18 are rejected under 35 U.S.C. 102(a) as being anticipated by OTG Supplement to the USB Specification 1.0 (OTG specification) as applied in the parent claim with implicit features evidenced by the USB 2.0 Specification.*

Regarding claim 19, the OTG specification does not expressly mention the use of NAK and IN tokens; however this is an implicit feature of the specification, as it is intended as a supplement (§1.2) to the USB 2.0 specification, which discloses these features (e.g., pp. 233-234).

Regarding claim 20, the OTG specification discloses the OTG host/peripheral interface (§6.4) does not expressly mention the polling for an OUT token; however this

is an implicit feature of the disclosure, as it supplements the USB 2.0 specification, which discloses these features (e.g., p. 269-270).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. *Claims 11-12 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over the OTG specification, as applied in respective parent claims, in view of standard means of holding executable instructions, as evidenced by McAlear (US 6721332).*

Regarding claims 11 and 12, the OTG specification does not expressly mention use of firmware and software; however Examiner takes Official Notice that this is broadly known as a useful means to hold and execute instructions, as evidenced by McAlear. McAlear discloses firmware instructions (e.g., col. 20, lines 32-25). It would have been obvious to combine firmware storing with the OTG specification, because using firmware is a standard means to hold computer instructions in a useful format for execution. Therefore, it would have been obvious to one of ordinary skill in the art to combine the OTG specification with a standard memory format to obtain the claimed invention.

Art Unit: 2112

Regarding claim 21, the OTG specification does not expressly mention use of computer readable media; however Examiner takes Official Notice that this is broadly known means for holding computer executable information, as evidenced by McAlear (e.g., col. 20, lines 32-35). It would have been obvious to combine use of computer readable media with the OTG specification, because the advantages of media to hold and transmit algorithmic information for computer reading of the OTG specification are clear and commonly appreciated. Therefore, it would have been obvious to one of ordinary skill in the art to combine computer readable media with the OTG specification to obtain the claimed invention.

Response to Arguments

Applicant's arguments, filed 10/04/04, with respect to Chang as a prior art reference have been fully considered and are persuasive. The rejections based on Chang have been withdrawn.

A new rejection is made *supra*.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Clifford H Knoll whose telephone number is 571-272-3636. The examiner can normally be reached on M-F 0630-1500.

Art Unit: 2112

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark H Rinehart can be reached on 571-272-3632. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

chk



MARK H. RINEHART
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100